

Abstract

A method of producing a carbon nanostructure is provided which can increase evenness of a shape and a purity of the carbon nanostructure and can reduce a production cost. In a method of producing a carbon nanostructure, a carbon crystal is grown by vapor phase epitaxy from a crystal growth surface of a catalyst base [(17)] including a catalyst material [(11)], and the catalyst base [(17)] is formed by diameter-reduction processing. The catalyst base [(17)] is preferably formed as an aggregate including an arrangement of a plurality of catalyst structures each formed with a non-catalyst material [(12)], a material not having a substantial catalytic function for growth of the carbon crystal, formed on at least a portion of a side surface of the catalyst material [(11)] of a columnar shape having the crystal growth surface as a top surface. In addition, a non-catalyst material [(15)] is preferably formed on at least a portion of a side surface of the aggregate, and the catalyst structures preferably have variations of at most CV 10% in surface areas of the catalyst material [(11)] on the crystal growth surface.